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Course Policy Statement
EN380 – Naval Materials Science and Engineering

Required Text: Properties of Engineering Materials, 2nd Ed., by R. A. Higgins

Required Notes: None in this section

1. **General:** Welcome to your introductory course in the materials used by naval architects and ocean engineers! In your career as a sea service officer you will often trust your life to the materials we will study, and you may be tasked with designing components with them. At the very least, you probably will need to interact with repair parties who may not know as much about the materials as you do at this moment!
2. **Grading Policy:** The course grade breakdown is as follows:

Class Participation	5%
Quizzes	20%
Team Material Selection Project	25%
Hourly Exams (3 @ 10% each)	30%
Final Exam	20%
3. **Exams, Quizzes and Design Problems:** All exams will be announced and are closed-book. A short, closed-book quiz will be given most Wednesdays, and will be based on the reading and lecture material. Calculators are permitted on both. Program them as you see fit! Exams and quizzes will include both “number crunchers” and theory. As it is difficult to be at your best every day, your lowest quiz score will be dropped. You may bring one 3”x5” note card to the hourly exams and up to four 3”x5” cards to the final. A design problem will be solved in-class by teams. This will be open-references.
4. **Laboratories:** Lab work is important to physically understand the theoretical concepts presented in class. Labs will not have report submissions, but the concepts in lab will be tested on the quizzes and exams.
5. **Homework:** The homework assignments (reading and problems) are **critical** for understanding the material and will typically take 30 minutes to 2 hours a week. A hallmark of engineering is cooperation between engineers to solve problems and you are encouraged to work in groups to solve the homework problems. Homework problems will be assigned that reflect the material in the reading and presented in class. Homework however, will not be collected. Quiz content reflects the material covered that week.
6. **Team Project:** A semester long team project will focus on selecting the “best” material to build a marine application. See the separate sheet for more information.
7. **Late Penalty:** As assignments may be discussed on the day it is due, any unexcused late work will be heavily penalized. This also represents “the real world”.
1-Lecture Late: -25% 1-Week late or later: -50%

You are responsible for any work that you miss. You are required to make up any missed exams

and are expected to make up any missed labs, homework or quizzes. If you know you will be absent, contact me ahead of time so that we can make suitable alternative arrangements. If you turn in a late assignment that is excused, write the reason on the top of the assignment.

8. **Extra Instruction:** I'm generally very available for extra instruction and encourage anyone not understanding a concept to discuss it with other students, or myself. Prepare for EI as you would for class. Bring your notes, homework, and other relevant information with you. If it is a computer assignment bring a floppy with your work. Have some specific questions. If you want EI, drop by my office (I'm usually there 8-5) or better yet, contact me (e-mail is best) so that we can arrange a mutually convenient time. My class schedule is:

EN445 MW 5, T 1-6

EN380 MWF 6

9. **Classroom Decorum:** "Midshipmen will conduct themselves properly at all times, respectfully observing the customs and traditions of the Naval Service."
10. **Section Leader:** "The section leader calls the class to attention at the sound of the bell or on the entry of the instructor, presents the section, reports absentees, and seats the section when directed by the instructor. If it is necessary for the instructor to leave the room during a recitation, the section leader assumes the responsibility for class decorum. Upon conclusion of the period, or when directed by the instructor, the section leader calls the midshipmen to attention and dismisses them."

Some Course References Available in Nimitz

A good series of books by Lawrence H. Van Vlack, including:
Elements Of Materials Science And Engineering
Materials For Engineering : Concepts And Applications
Materials Science For Engineers
Solutions Manual To Accompany Materials For Engineering : Concepts And Applications
A Textbook Of Materials Technology

The Fundamentals of Engineering (FE or EIT) Handbook and review books

EN380 Notes by Prof. Dawson